U.S. DEPARTMENT OF COMMERCE
National Technical Information Service

PB-260 326

SUMMARY REPORT ON QUALITY OF INTERSTATE WATERS
GRAND RIVER (NORTH DAKOTA - SOUTH DAKOTA)

PUBLIC HEALTH SERVICE
WASHINGTON, D. C.

APRIL 1961

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9/74 #09595

U.S. DEPARTMENT OF HEALTH, EDUCATION, AND WELFARE

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NATIONAL TECHNICAL
INFORMATION SERVICE
U.S. DEPARTMENT OF COMMERCE
SPRINGFIELD, VA. 22161

BIBLIOGRAPHIC DATA SHEET	1. Report No.	2.	3. Recipient's Accession No. PB-260 326
4. Title and Subtitle Summary Report on Quality of Interstate Waters. Grand River (North Dakota - South Dakota)			5. Report Date Apr 61 6.
7. Author(s)			8. Performing Organization Rept. No.
9. Performing Organization Name and Address Public Health Service, Washington, D. C.			10. Project/Task/Work Unit No. 11. Contract/Grant No.
12. Sponsoring Organization Name and Address			13. Type of Report & Period Covered 14.

15. Supplementary Notes
See also PB-260 327

16. Abstracts
The quality of water in the Grand River above the Shadehill Reservoir, at the junction of the North and South Fork, was examined. Tabular data are presented regarding sources of pollution, stream flow, interference with water uses, adequacy of treatment measures, action of official agencies, Public Health Service grants for construction of waste treatment facilities, nature of delays in abating pollution, and time schedule for proposed remedial action.

17. Key Words and Document Analysis. 17a. Descriptors

17b. Identifiers/Open-Ended Terms

*Water quality
*Water pollution sampling
Tables(Data)
Grand River
North Dakota
South Dakota
Stream flow
Water supply
State agencies
Construction
Water pollution control equipment

17c. COSATI Field/Group 13B

18. Availability Statement	19. Security Class (This Report) UNCLASSIFIED	21. No. of Pages 8
	20. Security Class (This Page UNCLASSIFIED	22. Price

SUMMARY REPORT ON QUALITY OF INTERSTATE WATERS

GRAND RIVER

(NORTH DAKOTA - SOUTH DAKOTA)

This report, one of a series developed by the Public Health Service, is a factual presentation of conditions which exist in a specific location or area, based on data and information furnished by State, Interstate and Federal agencies concerned. This report is a brief summary of such material in the files of the Public Health Service as of the time the report is issued. The report will be revised from time to time to reflect new information and changing conditions.

U. S. DEPARTMENT OF HEALTH, EDUCATION, AND WELFARE

PUBLIC HEALTH SERVICE

April 1961

SUMMARY REPORT ON QUALITY OF INTERSTATE WATERS

GRAND RIVER

(NORTH DAKOTA - SOUTH DAKOTA)

(Data Current to April 1961)

I. LOCATION

The Grand River rises in extreme northwestern South Dakota and flows easterly until it joins the Missouri River (river mile 1254) in north central South Dakota. The North Fork of the River crosses the North Dakota - South Dakota State line in two places (river mile 209-64 and 209-134) and it is this stream with which this summary will be concerned. The North and South Forks merge at river mile 209.

Only that portion of the North Fork above the Shadehill Reservoir located at the junction of the North and South Fork will be covered in this report. Bowman, North Dakota is the largest municipality on this stretch and Buffalo Creek (river mile 209-59), Lightning Creek (river mile 209-64) and Spring Creek (river mile 209-97) are major tributaries.

II. SOURCES OF POLLUTION

TABLE NO.1 - BASIC DATA ON SOURCES OF POLLUTION

Municipality or Industry	River Miles Above Mouth	Sewered Population	P.E. Waste Before Treatment	Nature of Wastes	Treatment Provided	P.E. Discharge to Water-course
Grand River						
North Fork	209					
Spring Creek	209-97					

TABLE NO. 1 - BASIC DATA ON SOURCES OF POLLUTION

Municipality or Industry	River Miles Above Mouth	Sewered Population	P.E. Waste Before Treatment	Nature of Wastes	Treatment Provided	P.E. Discharge to Watercourse
Bowman, N.D.	209-97-35	1,700	1,700	Municipal	Lagoon	170E 1/
North Fork	209					
Buffalo Creek	209-59					
Reeder, N.D.	209-59-18	300	300	Municipal	Lagoon	30 1/

To date discharges to the Grand River from the sources of pollution in North Dakota have continued as indicated above.

TABLE NO. 2 - STREAM FLOW DATA IN cfs

No. and Location of gaging station	Years of Record	Average	Maximum	Minimum
North Fork Grand River at Haley, N.D.	13	37	14,100	0
North Fork Grand River near White Butte, S.D.	12	80	30,900	0

III. INTERFERENCE WITH WATER USES

None.

IV. ADEQUACY OF TREATMENT MEASURES

The treatment facilities at Bowman, North Dakota and Reeder, North Dakota are adequate.

V. ACTION OF OFFICIAL AGENCIES

In June, 1952, the "Central Missouri River Drainage Basin" report, a joint State - Public Health Service project, was published.

1/ Estimated.

TABLE NO. 3 - PUBLIC HEALTH SERVICE GRANTS FOR CONSTRUCTION OF WASTE TREATMENT FACILITIES

Municipality	Date Approved	Amount	Estimated Total Cost of Project	Type of Project	Status of Project
Reeder, N.D.	2-12-57	$3,086	$14,013	Lagoon	Complete

VI. NATURE OF DELAYS IN ABATING POLLUTION

None.

VII. TIME SCHEDULE FOR PROPOSED REMEDIAL ACTION

None.

Prepared and Approved by Region VI, Kansas City, June, 1961

Approved by Enforcement Branch, April, 1962

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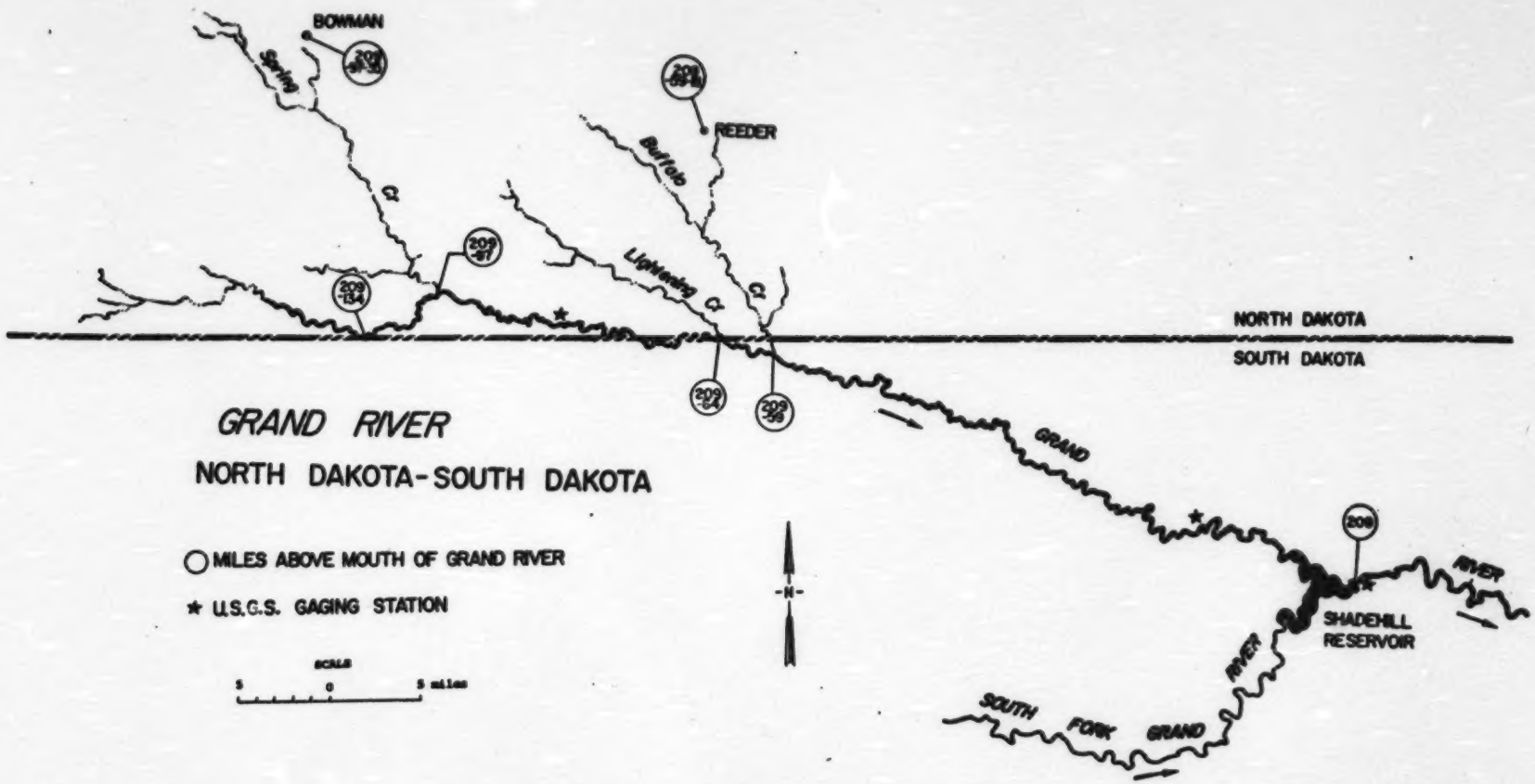
BOWMAN
Spring Cr.
REEDER
Buffalo Cr.
Lightning Cr.
NORTH DAKOTA
SOUTH DAKOTA
GRAND RIVER
NORTH DAKOTA-SOUTH DAKOTA
MILES ABOVE MOUTH OF GRAND RIVER
U.S.G.S. GAGING STATION
SCALE
5 0 5 miles
N
GRAND RIVER
SHADEHILL RESERVOIR
SOUTH FORK GRAND RIVER